



EASTERN RESEARCH GROUP, INC.

## MEMORANDUM

TO: Bill Maxwell, U.S. Environmental Protection Agency (EPA),  
Office of Air Quality Planning Standards (OAQPS) (MD-13)

FROM: Heather Wright, Eastern Research Group (ERG), Morrisville

DATE: December 1, 1998

SUBJECT: Final Summary of the April 30, 1998 Meeting of the Industrial Combustion  
Coordinated Rulemaking (ICCR) Process Heater Work Group

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### 1.0 INTRODUCTION

- The purpose of the meeting was to allow attendees to discuss various activities of the ICCR Process Heater Work Group (PHWG). The flash minutes for the meeting are included as attachment 1 and the meeting agenda is included as attachment 2.
- The meeting was held on April 30 in Ft. Collins, Colorado.
- A complete list of meeting attendees with their affiliations is included as attachment 3.

### 2.0 SUMMARY OF DISCUSSION AND DECISIONS

Work Group discussions are summarized in the following sections:

- 2.1 Coordinating Committee Meeting
- 2.2 Report on Fuel Oil-Like Liquids
- 2.3 Presentation on Other-Fired Process Heaters
- 2.4 Applicability Threshold Subgroup Report
- 2.5 MACT Documentation For Gas and Fuel Oil-Like Liquid-Fired Units
- 2.6 Fuel Switching

#### 2.1 Coordinating Committee Meeting

John Ogle led a discussion of the major issues addressed by the Coordinating Committee (CC) on April 28 and 29 prior to the PHWG meeting. Mr. Ogle provided the following updates:

- The Combustion Turbine Work Group (CTWG) made a presentation on MACT floor. The Work Group recommended that there is no floor for existing combustion turbines. Data show that there are no add-on HAP (hazardous air pollutant) controls. The Work Group concluded that HAP emissions from gas turbines are a function of operating load.
  - ▶ At the CC meeting, Fred Porter suggested that the other source work groups use this presentation as a model for summarizing and presenting their own floor recommendations.
  - ▶ Several PHWG members agreed that the CTWG presentation was very successful, as they presented their information in a succinct manner and clearly documented their floor determination. A PHWG member suggested that they use the CTWG presentation as a model when developing their presentations on MACT floor and MACT.
  - ▶ The PHWG also decided that they will review the GRI (Gas Research Institute) data discussed by the CTWG to determine if it contains information relative to process heaters.
- The CC asked that all the source work groups bring a testing plan to the July CC meeting. EPA work group co-chairs will be developing a matrix that is intended to help the source work groups prioritize and develop their testing plans by that time.
- The Incinerator Work Group presented a draft of their regulatory alternatives paper (RAP). The other source work groups were asked to review and comment on the RAP and were also asked to complete Appendix B forms for their 129 fuels. The Incinerator Work Group recommended that certain units should not be covered, including halogenated offgas incinerators, landfill gas flares, and scrap metal recovery units. In addition, the Incinerator Work Group presented a preliminary test plan which included biological waste incinerators, crematory incinerators, and drum recovery units.
  - ▶ There was concern within the PHWG that because a definition of waste has not been finalized, they do not know what materials are Section 129 fuels. A Work Group member stated that they will have to make logical assumptions as they complete the forms and that, at a minimum, it is likely they will complete the forms for petrochemical process liquids and wood.
- The Pollution Prevention (PP) Subgroup presented information on operator training and metrics to encourage pollution prevention in the ICCR (i.e., alternative MACT limits, such as mass emissions/heat input, mass emissions/energy output, and mass emissions/unit of production). Information on work practices and waste accounting and recordkeeping was also presented. The CC will be forwarding this information to the source work groups for review and consideration. Further, the Subgroup's charter was extended until the July CC meeting at which time they will present information on pollution prevention planning and compliance alternatives. The PP Subgroup plans to

complete documentation on fuel/waste constituent limits and fuel/waste *de minimis* constituent levels for posting to the TTN by May 15.

- The Boiler Work Group (BWG) presented the first phase of their testing plan to the CC. They anticipate that fuel analysis/characterization testing and emissions testing of combination fuel boilers will help them develop subcategories. In addition, the BWG believes that a significant amount of characterization information already exists, but they do not know the best way to find and compile it. The CC will forward a request to EPA for assistance with collecting fuel characterization data. The CC also asked the BWG to further develop their test plan for fuel mixtures and various operating ranges, as this information will likely be useful for all source work groups.
- The Internal Combustion Engine Work Group presented a preliminary MACT floor determination.
- The Milestone Tracking Subgroup announced that the source work groups are 4 to 18 months behind schedule on various tasks.
- Fred Porter explained that the FACA (Federal Advisory Committee Act) charter is up for renewal in September. EPA must decide if the charter will be renewed and if so, if it will continue in the same manner in which it has been proceeding or if it will be restructured. EPA will make a decision on the renewal of the FACA charter by the July CC meeting.

Topics from the CC meeting that resulted in further discussion by the PHWG are summarized in the following sections:

#### 2.1.1 Pollution Prevention

#### 2.1.2 Testing Needs

### 2.1.1 Pollution Prevention

- Janet Peargin is leaving the PHWG and thus, is unable to continue representing the Work Group as a member of the PP Subgroup. It was decided that Chuck Feerick will replace Ms. Peargin as the PHWG's representative. It was also decided that Mr. Feerick will forward draft information developed by the PP Subgroup to Lee Gilmer, Bob Morris, John Ogle, and Lawrence Otwell for their review and input, as appropriate.
- Ms. Peargin explained that the PP Subgroup will be making presentations on alternative compliance options (i.e., additional ways to achieve the MACT level result) and pollution prevention planning (i.e., a place for requiring or offering pollution prevention as an option in the regulations) in July. Work Group members asked if : 1) this information will affect the PHWG, 2) if HAP emissions could be reduced by implementation of the

information to be presented, and 3) if the PP Subgroup will suggest that the information be used as part of the floor or for beyond the floor determinations.

- A Work Group member said that it is likely that the PP Subgroup will find it difficult to develop methods by which regulators and inspectors can evaluate these alternative methods and to determine how they will be placed into rules. Work Group members stated that if pollution prevention is not actually incorporated into the rules themselves, it will be difficult to implement. Another Work Group member also stated that there is potential for pollution prevention planning in the rulemaking process, but that EPA must develop a mechanism for incorporating it into the rules and evaluating it.
- A Work Group member stated that the petrochemical industry is interested in considering the use of *de minimis* levels in development of the MACT standards, similar to the information on fuel/waste *de minimis* constituent levels that the PP Subgroup is developing.
- Concern was expressed that the transfer of pollution from one media to another (i.e., air to water) would not be considered in the pollution prevention recommendations. Ms. Peargin stated that the PP Subgroup is taking this into consideration and that pollution prevention, in theory, is supposed to result in reduced emissions to all media.
- A Work Group member stated that when developing their recommendations to the CC, the PHWG must consider pollution prevention options.

### **2.1.2 Testing Needs**

- Bill Maxwell asked Work Group members to consider if the PHWG has any testing needs beyond those proposed by the Boiler and Incinerator Work Groups. A suggestion was made that the PHWG review the testing and fuel characterization plan presented by the BWG at the CC meeting and determine if there are any fuels/wastes that they want to request be included for testing and characterization.
  - ▶ Work Group members expressed concern over whether test results for boilers and incinerators can be extrapolated to process heaters. A Work Group member suggested that if a boiler and a process heater both burn wood, the emissions should be the same for both. Another Work Group member proposed that since they are different units, the device processes might be so dissimilar that each unit generates different levels of pollutants.
  - ▶ It was suggested that the PHWG pursue data collection for fuels other than coal and wood/biomass, because they are the fuels that the BWG will likely have the most information on.
  - ▶ It was also suggested that the Work Group obtain data on particulate matter controls and try to determine whether such controls can reduce HAP emissions, as discussed during previous meetings.

- ▶ A Work Group member stated that the Office of Water is working on solid waste combustion and its relationship to wastewater standards and suggested that an exchange of information on solid waste combustion be coordinated with the ICCR.
- Bill Maxwell stated that EPA is in the process of requesting emissions test reports from facilities who reported in their survey responses that they have conducted testing.
- The PHWG will hold a conference call on June 4 to further discuss testing needs.

## 2.2 **Report on Fuel Oil-Like Liquids**

Lee Gilmer lead a discussion of the information available to the PHWG to make a determination on fuel oil-like liquids.

- Mr. Gilmer stated that the PHWG has BTX (benzene, toluene, and xylene), PAH (polycyclic aromatic hydrocarbons), and formaldehyde data for crude oil, pipeline oil, and #6 fuel oil.
  - ▶ A question was raised as to whether crude oil and pipeline oil can be considered the same. Mr. Gilmer stated that both materials behave the same as fuel oil according to the fuel characteristics data.
  - ▶ There is no information on metals or halogens at this time. A Work Group member suggested that they keep this in mind when developing their testing plan (i.e., request testing for halogens and metals fuel content).
- Questions were raised as to how the PHWG is defining a fuel oil-like liquid and whether it can be based solely on fuels having similar characteristics as fuel oil. Another question was raised as to why they were trying to define this and whether the Work Group will use the information for subcategorization. Mary Lalley explained that the original charge by the Work Group was to determine what fuel oils can be grouped together. Mr. Gilmer added that the Work Group may be able to make a no MACT floor determination for fuels similar to fuel oil. The Work Group discussed whether emissions data should be used as a basis for subcategorization. Bill Maxwell suggested that the questions the PHWG should be asking themselves is whether the fuels combust similarly to fuel oil and if the emissions are the same.
  - ▶ It was pointed out that the BWG is trying to answer similar questions in order to make the same decisions about MACT floor.
  - ▶ A Work Group member suggested that they subcategorize all liquid fuels first, before trying to determine if they behave like fuel oil or natural gas.

- ▶ Another Work Group member asked if they should look at add-on controls as well, or only at fuel characterization and emissions data.
- The Work Group agreed that they must make determinations on four categories of liquid fuels: fuel oils, crude oil, waste oil, and other liquids. It was decided that black liquor does not have to be considered because it is covered under another rule and is not usually burned in indirect-fired process heaters. It was mentioned by some individuals that the Work Group should carefully consider each fuel type before beginning to group them together.
- It was mentioned that they must make a determination on fuel oil-like liquids for the July CC meeting based on the schedule that the Work Group developed in February. The Work Group agreed that it is a difficult issue and much work will need to be performed before they can make a final determination.

### **2.3 Presentation on Other-Fired Process Heaters**

Bill Maxwell and Jason Huckaby presented information on other-fired process heaters (see handouts presented as attachment 4).

- Mr. Maxwell explained that EPA and its contractor, in conjunction with the Other Fired Process Heater Subgroup, have reviewed and consolidated the data for other-fired, indirect units to assist the Work Group in determining testing needs and MACT floor. Since the February PHWG meeting, EPA has removed from the other-fired list: direct-fired units, hydrocarbon gas-fired units, units covered under other MACTs, and misclassified or erroneous entries.
  - ▶ By performing keyword searches, EPA was able to remove several direct-fired units that were still on the other-fired list. Keyword searches revealed that not all unit descriptions that would enable the Work Group to determine if a unit was direct-fired were located in obvious fields in the database.
  - ▶ EPA also reviewed the information on those units that were considered "not likely to be process heaters". Many of these units were located at construction companies/sites. A Work Group member stated that removal of those units might present a problem during data analysis, because some kinds of indirect process heaters are often located at construction facilities.
  - ▶ To allow Work Group members to review the data, the remaining units in the other-fired list were sorted into the following fuel types: coal, crude oil, residual oil, fuel oil, gas, wood, other gas, other liquid, other solid, and unspecified (use of the term unspecified means that it is not known what type of fuel is being burned). The Work Group agreed that these are appropriate groupings for purposes of

review. A question was raised as to why fuel oil- and gas-fired units are still on the other-fired list. It was explained that these units were left on the list because they are co-fired with unspecified or other fuels.

- It was suggested that the Work Group document the number of units that were originally listed as other-fired and how many units were then removed and why. It was further suggested that this type of documentation be done for all process heaters in the original database.
  - ▶ It was decided that EPA will develop an "accounting/flow diagram" to account for all units in the initial process heater population database and document reasons for any removals. The diagram will show the breakdown of units by fuel category (natural gas, fuel oil and like fuels, etc.). A Work Group member also suggested that they need to know how many units in the process heater population are controlled. It was also decided that EPA will compile the numbers on controlled units as well. These efforts will be performed in conjunction with Lee Gilmer by the end of May.
- The Work Group reviewed the tables, organized by fuel type, to determine if the units should be removed from the other-fired list:
  - ▶ coal- Roy Carwile will determine if the units described in lines 1 and 2 should be removed from the other-fired list. Lee Gilmer will determine if the units described in lines 3 and 4 should be removed from the other-fired list.
  - ▶ crude oil- The Work Group agreed to leave these units as a separate fuel subgroup.
  - ▶ residual oil- The Work Group decided that the controlled units in this table are not likely to be indirect units, and thus should be removed from the other-fired list.
  - ▶ fuel oil- The Work Group decided that the units in this table that have HAP emissions controls are not likely to be indirect units, and are possibly covered under other MACTs. Thus, these units should be removed from the other-fired list.
  - ▶ gas with add-on controls- It was decided that Work Group members will review this list outside the meeting and forward comments to Bill Maxwell. Members should try to determine if the units are directly or indirectly fired, covered under other MACT standards, and if the units should remain as a separate fuel subgroup.
  - ▶ wood- Lawrence Otwell stated there should be some wood and coal mixtures in the database, but presently there are none on the list. It was decided that Mr. Otwell will review the table for accuracy and that the unit in line 2 will remain in the other fired list. Bill Maxwell asked that the Work Group try to determine if

the controls on the wood fired units are HAP emission controls or other types of controls. In addition, the Work Group agreed to leave these units as a separate fuel subgroup, because there is the possibility that the floor for these units will be add-on controls.

- ▶ other gas- It was decided that Work Group members will review this list outside the meeting and forward comments to Bill Maxwell. Members should try to determine if the units are directly or indirectly fired, covered under other MACT standards, and if the units should remain as a separate fuel subgroup or whether they can be placed with natural gas and/or fuel oil. It was also suggested that the units in lines 1 and 3 be removed because they will be covered under the HON.
  - ▶ other liquid- It was decided that Work Group members will review this list outside the meeting and forward comments to Bill Maxwell. Members should try to determine if the units are directly or indirectly fired and if they are covered under other MACT standards. The Work Group agreed to leave these units as a separate fuel subgroup. A Work Group member suggested that some of these units, such as space heaters, be removed because of their small size. Bill Maxwell reminded the Work Group that there will be no size cut-offs for 129 fuels; all units firing 129 fuels will be regulated. For example, if waste oil is determined to be a 129 fuel, then even if it is fired in a small space heater, it will still be regulated.
  - ▶ other solid- It was decided that Work Group members will review this list outside the meeting and forward comments to Bill Maxwell. Members should try to determine if the units are directly or indirectly fired, covered under other MACT standards, and if the units should remain as a separate fuel subgroup.
  - ▶ unspecified- There are approximately 1000 units in this category. It was mentioned that this is an insignificant number out of the total process heater population and it will take much effort to determine what types of fuels are being burned so that the information is useful to the Work Group. It was decided by the Work Group, that based on the reliability of the data, the process heaters in the databases are representative of the population even without the units for which fuels are unspecified.
- A question was raised as to the difference in definitions of waste oil and used oil. Another question arose as to whether RCRA fuels will be covered under the ICCR. It was decided that EPA will research the definitions of used oil and waste oil and will also determine if it is necessary to address used oil covered under RCRA in the ICCR. It was mentioned that there are several waste oil units in the other liquid category.
  - The Work Group agreed that indirect units fall into five general categories: generic petrochemical, asphalt heaters, space heaters/hot oil, gypsum units, and heat treating. Food and agriculture units are not included, because it is likely that most are natural gas-



fired. A question was raised as to whether there are some unique processes that will not be covered by the five categories.

- Information on the current number of test reports with HAP emissions data that have been obtained for boilers was also distributed to the PHWG (see handout presented as attachment 5).

## **2.4 Applicability Threshold Subgroup Report**

- It was decided at the February meeting that the Applicability Threshold Subgroup would: 1) investigate the differences between exempting from the applicability of a standard as opposed to exempting from the applicability of a control requirement, 2) collect information on how to determine an applicability threshold and the possible basis for establishing one, and 3) begin to scope out the need for a percent co-fired fuel *de minimis* determination to be applied to the definition of solid waste incinerator. To date, little progress has been made on these action items, and Work Group members agreed that it is now important for the Subgroup to begin addressing these issues.
  - ▶ A Work Group member suggested that the Subgroup review other MACT rules and determine what examples currently exist of *de minimis* levels.
- It is also important for the Subgroup to investigate how the Work Group will address fuel mixtures and how they will determine what mixtures will be subject to a Section 129 regulation. For example, if natural gas and process gas are co-fired, what percentage of process gas will result in the unit being regulated under Section 129? Several Work Group members agreed that this is an important issue that must be resolved.
  - ▶ It was suggested that the Subgroup wait until the Work Group determines their fuel subcategories before investigating applicability issues.

## **2.5 MACT Documentation For Gas and Fuel Oil-Like Liquid-Fired Units**

- Lee Gilmer stated that API is examining WSPA (Western States Petroleum Association), PERF (Petroleum Environmental Research Forum), GRI (Gas Research Institute), and ICCR data for information on combustion outside of normal operating practices and process variations. The information gathered will be used by the PHWG for documentation purposes.
- Mr. Gilmer also summarized what items must be included with the Work Group's documentation for natural gas and fuel oil-like liquid fired units: 1) a population analysis to show that the data are representative of the entire process heater population, 2) documentation that <12% of the units are controlled, 3) an accounting/flow diagram, 4) documentation of the differences between process heaters and other process units, 5) emissions database documentation on fuel variation, and 6) time, temperature, and turbulence information. Mr. Gilmer asked that Work Group members advise him of any additional items that should be included with the MACT floor documentation.

- ▶ It was mentioned that the MACT Documentation Subgroup should use the CTWG presentation as a model when compiling their data and information.
- ▶ The Work Group decided that they will use the documentation paper to present background information, in addition to presenting their MACT floor determination.
- Questions arose as to whether the Work Group should have documentation for all subcategories of fuels and whether they should include above the floor options that are identified. It was determined that they will have to provide documentation for above the floor options as well, but the Work Group did not decide if the documentation will be included in the same document as the MACT floor.
- Janet Peargin reminded the Work Group that they will also have to document how they considered pollution prevention in their recommendations.
- Another question arose as to whether the MACT Documentation Subgroup will compile documentation for other-fired units as well. The Work Group decided that the MACT Documentation Subgroup will develop the documentation for natural gas and fuel oil-like liquid-fired units and that the Other-Fired Process Heater Subgroup will develop the documentation for other-fired units. The two subgroups will use similar formats when compiling their documentation, which will be combined into one document for presentation to the CC.
  - ▶ Lee Gilmer will distribute an outline of the documentation paper for natural gas and fuel oil-like liquids to Work Group members.
- A question was raised as to whether the PHWG will also complete the MACT floor determination for other-fired units by the July CC meeting. The Work Group decided that a final determination of the MACT floor and MACT for indirect, gas- and fuel oil-like liquid-fired units and other-fired units will be completed by July, but will not be presented until the September CC meeting. The Work Group left as an option, the possibility of presenting the information as draft at the July CC meeting, and then finalizing it for September.
- A question arose as to how and when the Work Group will deal with new sources. Work Group members agreed that they must complete MACT for existing sources before turning to new sources which will likely be easier, because MACT will be based on controls. If the data show that HAP controls exist for process heaters, then those controls will be MACT floor for new sources.

## **2.6 Fuel Switching**

- The Work Group discussed how they should consider fuel switching. Concern was raised that many industries rely on being able to use various fuels and that a fuel switching

requirement would be too burdensome. In areas where crude oil is used, it is probably the only fuel that is available. In addition, some Work Group members believe that fuel switching cannot be mandated within the ICCR and that there is no precedence for a fuel switching requirement in any other MACTs.

- A question was raised as to whether fuel switching should be a floor or a beyond the floor consideration. It was pointed out that if heaters are subcategorized by fuel, fuel switching may be precluded. If the PHWG makes recommendations based on fuel subcategories, the regulations will vary depending on the type of fuel being burned and thus, it would not be feasible to mandate fuel switching.

### **3.0 UPCOMING MEETINGS**

- A teleconference is scheduled for June 4 at 2:00 p.m. Eastern time.
- A meeting is scheduled for July 30 and July 31 in Long Beach, CA.

**These minutes represent an accurate description of matters discussed and conclusions reached and include a copy of all reports received, issued, or approved at the April 30, 1998 meeting of the Industrial Combustion Coordinated Rulemaking (ICCR) Process Heater Work Group. Fred Porter, EPA Co-Chair.**

**Attachment 1**

**Flash Minutes From The April 30, 1998 Meeting Of  
The ICCR Process Heater Work Group**

**ICCR Process Heater Work Group Meeting**  
**April 30, 1998**  
**Ft. Collins, Colorado**

**DECISIONS**

Chuck Feerick will replace Janet Peargin as the Work Group's representative to the Pollution Prevention Subgroup.

The Work Group decided that a final determination of the MACT floor and MACT for indirect, gas- and fuel oil-like liquid-fired units and other-fired units will be completed by July. The Work Group will finalize the information and present it to the Coordinating Committee in September.

The Work Group determined that the process heaters in the databases are representative of the population even without the units for which fuels are unspecified.

The Work Group decided that the MACT Documentation Subgroup would develop documentation for natural gas and fuel oil-like liquid-fired units and that the Other-Fired Process Heater Subgroup would handle documentation for their category of units. The two groups will use similar formats when compiling their documentation which will be combined into one document for presentation to the Coordinating Committee.

When reviewing the Other-Fired Units tables, the Work Group agreed that units in the following subgroups will not be grouped with fuel oil-like units for now (i.e., leave as a separate fuel subgroups): crude oil, wood, other liquid. In addition, the Work Group agreed that the three units in the residual details table and the nine units in the fuel oil details table are to be removed from the other-fired units database, because they are not likely to be indirect-fired units.

**ACTION ITEMS**

The Work Group will determine testing needs prior to the July Coordinating Committee meeting (to be discussed during the June 4 teleconference). The Work Group will review the Boiler Work Group testing and fuel characterization plan presented at the Coordinating Committee meeting to determine if there are any fuels/wastes that should be included for testing and characterization.

The Work Group will review and comment on the draft regulatory alternatives paper presented by the Incinerator Work Group at the Coordinating Committee meeting. In addition, the Work Group must complete Appendix B forms for 129 fuels.

The Work Group will review and consider the information presented by the Pollution Prevention Subgroup at the Coordinating Committee meeting.

Chuck Feerick will forward Pollution Prevention Subgroup draft documents to Lee Gilmer, Bob Morris, John Ogle, and Lawrence Otwell for their review and input, as appropriate.

The Work Group will review the GRI (Gas Research Institute) data to determine if it contains information relative to process heaters.

EPA will develop an “accounting/flow diagram” to account for all units in the initial process heater population database and document reasons for any deletions. The diagram will also show the breakdown of units by fuel category (natural gas, fuel-oil and like fuels, etc.). In addition, EPA will compile the numbers on controlled units as well. These efforts will be performed in coordination with Lee Gilmer by the end of May.

EPA will research the definitions of used oil and waste oil and will also determine if it is necessary to address through the ICCR used oil covered under RCRA.

Work Group members will inform Lee Gilmer of any additional items that should be included with the MACT floor documentation for natural gas and fuel oil-like liquid-fired units (beyond what Mr. Gilmer reported at the meeting).

Lee Gilmer will distribute an outline of the documentation paper for natural gas and fuel oil-like liquids to Work Group members by May 8.

The following action items refer to the Other-Fired Units tables which were reviewed during the meeting:

- Roy Carwile will determine if the units described in lines 1 and 2 of the coal details table should be removed from the other-fired database.
- Lee Gilmer will determine if the units described in lines 3 and 4 of the coal details table should be removed from the other-fired database.
- Work Group members will review the following tables and forward comments to Bill Maxwell by May 18: gas with add-on controls, other gas, other liquid, and other solid. Members should try to determine if the units are directly or indirectly fired, if they are covered under other MACT standards, or if the units should remain as separate fuel subgroups.
- Lawrence Otwell will review the wood details table for accuracy.

#### UPCOMING MEETINGS

A teleconference is scheduled for June 4 at 2:00 p.m. Eastern time. The call-in number is (919) 541-4486.

A meeting is scheduled for July 30 and 31 in Long Beach, CA.

**Attachment 2**

**Meeting Agenda**

## **AGENDA**

Process Heaters Source Work Group Meeting  
Thursday, April 30, 1998  
8:00 a.m. - 3:00 p.m.  
Fort Collins, CO

<b><u>When</u></b>	<b><u>What</u></b>	<b><u>Who</u></b>	<b><u>Outcome</u></b>
8:00	Open Meeting	Bill Maxwell	
8:00-8:10	Review Agenda and Groundrules	Mary Lalley	
8:10-9:00	Review and Discuss CC Meeting	John Ogle	WG members updated on CC meeting proceedings
9:00-9:15	Report on Fuel Oil- Like Fuels	Lee Gilmer Jim Seebold	WG updated on data for liquids that may be like fuel oil
9:15-9:45	Closure on Fuel Oil- Like Fuel Discussion	All	Decision on definition of fuel oil-like
9:40-10:00	Break		
10:00-10:30	Report on Data for Other-Fired Process Heaters	Jason Huckaby	WG updated on information for other-fired units
10:30-11:00	Discussion of Other-Fired Heaters	Bill Maxwell	Suggestions for approaching other-fired heaters
11:00-11:15	Closure on Other-Fired Heater Discussion	Lawrence Otwell	Decisions and action items regarding other-fired process heaters
11:15-11:30	Report From Applicability Threshold Subgroup	John Ogle	WG updated on possible approaches for applicability threshold
11:30-11:45	Discussion of Applicability Threshold	All	Suggestions for approaching applicability thresholds
11:45-12:00	Closure on Applicability Threshold Discussion	All	Decisions and action items regarding applicability thresholds
12:00-1:00	Lunch		



<b><u>When</u></b>	<b><u>What</u></b>	<b><u>Who</u></b>	<b><u>Outcome</u></b>
1:00-1:15	Report from MACT Documentation Subgroup	Lee Gilmer	WG updated on documentation progress
1:15-2:00	Discussion of MACT Floor presentation at July CC meeting	All	Suggestions for presentation
2:00-2:30	Closure on MACT Floor Presentation Discussion	All	Decisions and action items regarding presentation to CC
2:30-2:50	Review Work Group Progress	Bill Maxwell	Additional action items
2:50-3:00	Flash Minutes	Heather Wright	Action items and decisions reviewed

### **Attachment 3**

#### **Meeting Participants**

## MEETING ATTENDEES

Roy Carwile, Aluminum Company of America  
Chuck Feerick, Exxon Company USA  
Bruno Ferraro, Grove Scientific Company  
Klane Forsgren, Sinclair Oil Corporation  
Lee Gilmer, Texaco, Inc.  
Jason Huckaby, Eastern Research Group, Inc.  
Greg Johnson, Shell Development Company  
Tim Hunt, American Petroleum Institute  
Mary Lalley, Eastern Research Group, Inc.  
Bill Maxwell, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards  
Diane McConkey, U.S. Environmental Protection Agency, Office of General Counsel  
Bob Morris, The Coastal Corporation  
John Ogle, Consultant, Dow Chemical Company  
Lawrence Otwell, Georgia-Pacific Corporation  
Janet Peargin, Chevron Corporation  
Jim Seebold, Chevron Research & Technology Company  
Dave Smith, Central Soya Company, Inc.  
Oliver Stanley, Cargill, Inc.  
Karluss Thomas, Chemical Manufacturers Association  
Heather Wright, Eastern Research Group, Inc.

**Attachment 4**

**Screening and Consolidation of Data for Other-Fired, Indirect Process Heaters**

**(Handouts unavailable electronically, please refer to docket copy.)**

**Attachment 5**

**Number of Boiler Test Reports With HAP Emissions Data**

**(Handouts unavailable electronically, please refer to docket copy.)**